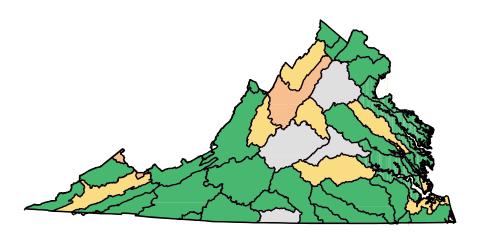
### Virginia



Percent of Assessed Rivers, Lakes, and Estuaries Meeting All Designated Uses

80% - 100% Meeting All Uses 50% - 79% Meeting All Uses

20% - 49% Meeting All Uses
0% - 19% Meeting All Uses

Insufficient Assessment Coverage

Basin Boundaries
 (USGS 8-Digit Hydrologic Unit)

For a copy of the Virginia 1998 305(b) report, contact:

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#### **Surface Water Quality**

Of the 49,358 river miles assessed, 42% fully support aquatic life use, another 51% fully support this use now but are threatened, 5% partially support this use, and 2% do not support this use. As in past years, fecal coliform bacteria are the most widespread problem in rivers and streams. Agriculture and grazing-related sources contribute much of the fecal coliform bacteria in Virginia's waters. Urban runoff also is a significant source of impacts in both rivers and estuaries.

All of Virginia's assessed publicly owned lakes fully support aquatic life use as well as fish consumption and swimming uses. Dissolved oxygen depletion, possibly associated with excess nutrients, and siltation from nonpoint sources were identified as threats to some of these lakes.

In estuaries, 7% of the assessed waters fully support aquatic life use, 81% support this use but are threatened, 10% partially support this use, and 3% do not support this use. Organic enrichment is the most common problem in Virginia's estuarine waters, followed by low dissolved oxygen concentrations. Based on available information, all of Virginia's Atlantic Ocean shoreline fully supports designated uses.

The Virginia Department of Health Bureau of Toxic Substances Information has five health advisories and one restriction currently in effect for fish consumption.

Virginia did not report on the condition of wetlands.

### **Ground Water Quality**

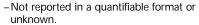
Ground water programs in Virginia strive to maintain the existing high water quality. Sources of ground water contamination in the state include fertilizer and pesticide applications, underground storage tanks, landfills, septic systems, mining, and urban runoff. The Virginia Ground Water Protection Steering Committee meets bimonthly to share information, direct attention to ground water issues, and take the lead on interagency ground water protection initiatives.

# Programs to Restore Water Quality

Virginia's Department of Environmental Quality recommends control measures for water quality problems identified in the 305(b) report in their Water Quality Management Plans (WQMPs). WQMPs establish a strategy for bringing impaired waters up to water quality standards and preventing the degradation of high-quality waters. Control measures are implemented through Virginia's point source permit program and application of best management practices for nonpoint sources.

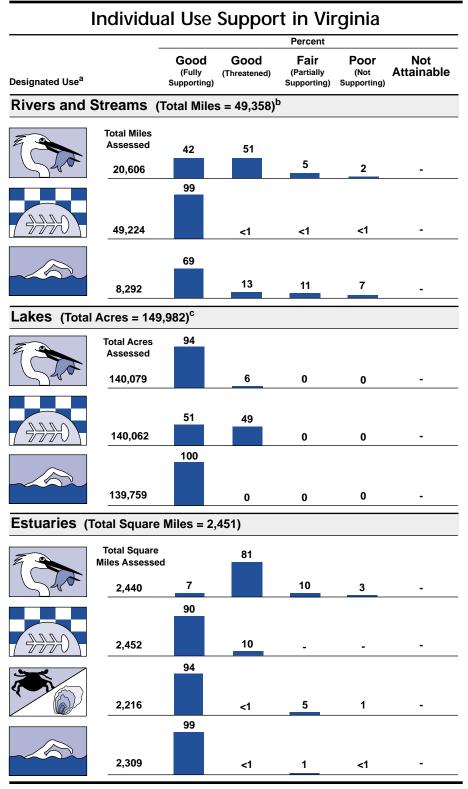
## Programs to Assess Water Quality

The Ambient Water Quality Monitoring Program has grown to include 1,620 monitoring stations, of which 1,349 are ambient water quality stations and 277 are biological monitoring stations. Stations are located to gather information from industrial, urban, rural, and undeveloped areas of the state. Virginia's 305(b) assessments also utilize information from fish tissue, benthic macroinvertebrates, and volunteer monitoring programs.



<sup>&</sup>lt;sup>a</sup> A subset of Virginia's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

<sup>&</sup>lt;sup>c</sup> Size of significant publicly owned lakes, a subset of all lakes in Virginia.



Note: Figures may not add to 100% due to rounding.

b Includes nonperennial streams that dry up and do not flow all year.